

**GCSE**

**GEOGRAPHY A**

Unit A671: *Extreme Environments*

**Specimen Paper**

**H**

**J380**

Time: 1 hour

Candidates answer on the question paper.

**Additional materials:**

Resource Booklet

Candidate  
Forename

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Candidate  
Surname

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Centre  
Number

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Candidate  
Number

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**INSTRUCTIONS TO CANDIDATES**

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do not write in the bar codes.
- Do not write outside the box bordering each page.
- Write your answer to each question in the space provided.

**INFORMATION FOR CANDIDATES**

- The number of marks for each question is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is 50.

**FOR EXAMINER'S USE**

A	
B	
TOTAL	

This document consists of **9** printed pages and **1** blank page.

**Section A – Hot Deserts**Answer **all** questions**1**

- (a)** Explain why hot deserts are classed as extreme environments.

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..... **[3]**

- (b)** Name and describe **ONE** physical process that may occur in a hot desert environment. You may draw a diagram to help you.

.....

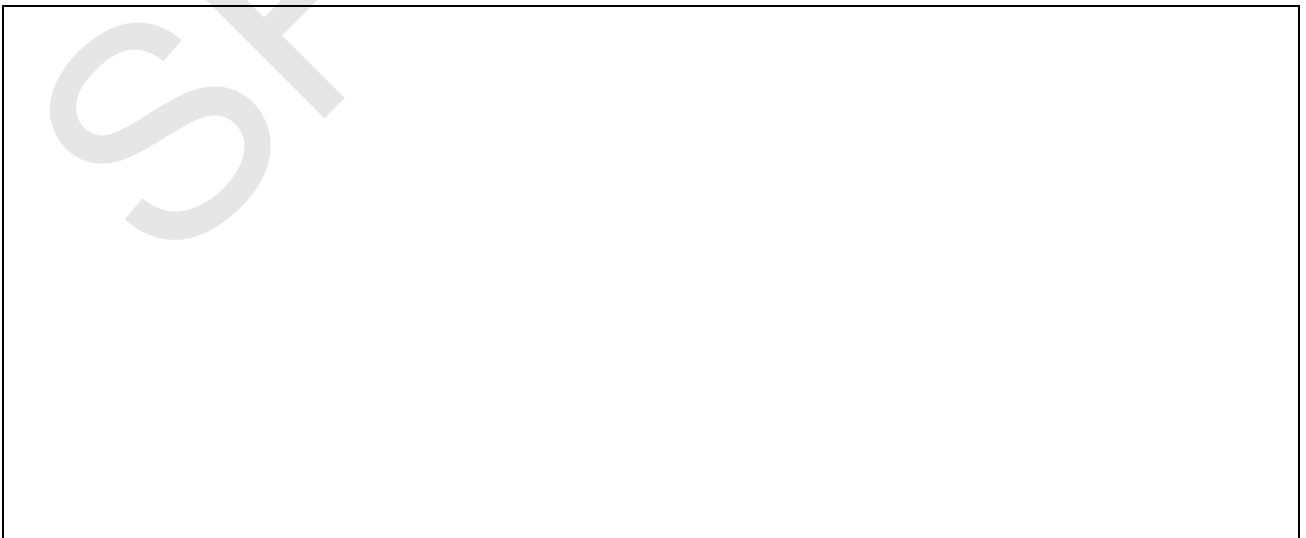
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**[3]**

Study **Fig. 1** and **Fig. 2** in the separate Resource Booklet.

- (c) (i) Use **Fig. 1** to identify **TWO** features of the climatic pattern.

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..... [2]

- (ii) Explain why the climatic pattern leads to a desert environment as shown in **Fig 2**.

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..... [3]

- 2 (a) Explain why desertification occurs.

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..... [3]

**Fig 3**

Over the past few years, it has become increasingly clear that desertification is one of the most pressing global environmental challenges of our time... Desertification has emerged as an environmental crisis of global proportions, currently affecting an estimated 100 to 200 million people, and threatening the lives and livelihoods of a much larger number...

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**(b)** Study **Fig 3** above which suggests that desertification is a major global challenge.

Explain why it creates problems for the environment and people.

[6]

Section A Total [20]

SPECIMEN

**Section B – Your Chosen Extreme Environment**

Your answers must refer to **either** a polar environment **or** a mountain environment.

Indicate your choice of extreme environment .....

- 3 (a)** Explain **TWO** reasons why your chosen environment is extreme.

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..... [4]

- (b)** Describe and explain how physical processes have shaped the landscape of the area you have studied. You may use a diagram to illustrate your answer.

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..... [6]

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**(c)** Explain why your chosen extreme environment is challenging for different groups of people.

[6]

**(d)** You have been asked to organise an expedition to your chosen extreme environment. Identify and justify **TWO** essential survival items that you would take.

..... [4]

**4 (a)** Identify **ONE** source that you found useful when studying your extreme environment. Explain how it helped your understanding of the extreme environment.

Source .....

**4 (b)** How do you think your chosen extreme environment may change in the future? Explain the impact of these changes.

SPECIMEN

[8]

**[8]**

Section B Total [30]

**Total Marks [50]**



*Copyright Acknowledgements:*

Fig.3: From *Overcoming One of the Greatest Environmental Challenges of Our Times: Re-Thinking Policies to cope with Desertification*. ISBN 92-808-6004-6. With Kind Permission of © The United Nations University, 2007

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SPECIMEN

The maximum mark for this paper is 50.

SPECIMEN

Section A – Hot Deserts		
Question Number	Answer	Max Mark
1(a)	<p><b>Explain why hot deserts are classed as extreme environments.</b></p> <p>Point marking.</p> <p>High daytime temperatures ✓ low night time temperatures ✓ lack of rainfall ✓ isolation idea ✓ lack of resources idea ✓</p> <p>Credit recognition of contrast with less extreme environments ✓</p>	[3]
1(b)	<p><b>Name and describe <u>ONE</u> physical process that may occur in a hot desert environment. You may draw a diagram to help you.</b></p> <p>Insolation weathering ✓ exfoliation ✓ granular disintegration ✓ onion skin ✓ freeze thaw ✓ chemical weathering ✓</p> <p>Process name [1], accurate description either using annotated and accurate diagram or written text [1+1]</p>	[3]
1(c)(i)	<p><b>Use Fig. 1 to identify two features of the climatic pattern.</b></p> <p>Any two valid, descriptive points.</p> <p>E.g. Some months have no precipitation ✓ any NAMED reference to temperature ✓ correlation between temperature and precipitation ✓</p>	[2]
(c)(ii)	<p><b>Explain why the climatic pattern leads to a desert environment as shown in Fig 2.</b></p> <p>Looking for reasonable links between climate and landscape.</p> <p>E.g. High temperatures allied with no precipitation ✓ means very little vegetation can grow ✓ and sand encroaches ✓</p> <p>E.g. No rainfall leads to little vegetation ✓ so soil is not bonded and can erode ✓ and sand encroaches ✓</p>	[3]

Section A – Hot Deserts		
Question Number	Answer	Max Mark
2(a)	<p><b>Explain why desertification occurs.</b></p> <p>Point marking, ONE mark for a basic idea further marks for development or further ideas.</p> <p>Indicative content</p> <p>Overcultivation ✓ population growth (dev)</p> <p>high birth rates ✓ more food needed (dev)</p> <p>migration idea ✓</p> <p>Overgrazing ✓ Nomadic farmers allow grazing on marginal land (dev)</p> <p>Deforestation ✓ Vegetation felled - fuelwood needed (dev)</p> <p>Increased population means increasing demand for wood ✓</p> <p>Climate change/global warming ✓</p> <p>Climate becoming drier/ Less rainfall ✓</p> <p>Fires ✓ started from ash becoming out of control ✓</p> <p>Migration ✓ Refugees from civil wars/droughts/persecution ✓</p>	[3]

Section A – Hot Deserts		
Question Number	Answer	Max Mark
2(b)	<p>Study <b>Fig 3</b> above which suggests that desertification is a major global challenge.</p> <p>Explain why it creates problems for the environment and people.</p> <p><b>MARKS</b></p> <p><b>Level 3 [5-6 marks]</b> A developed explanation of the problems caused by desertification to include both environment and people.</p> <p><b>Level 2 [3-4 marks]</b> Basic explanation of the problems caused by desertification or may include developed explanation of environment <u>or</u> people, or a basic explanation of both.</p> <p><b>Level 1 [1-2 marks]</b> Basic description of the problems caused by desertification.</p> <p><b>0 marks</b></p> <p>No evidence submitted or response does not address the question.</p> <p><b>INDICATIVE CONTENT</b></p> <p><b>PROBLEMS ON ENVIRONMENT</b></p> <p>Land exhausted of nutrients ✓</p> <p>Soil is lost ✓ through wind erosion ✓</p> <p>Overgrazing means land stripped bare ✓ making soil more vulnerable to erosion ✓</p> <p>Protective vegetation disappears makes soil more vulnerable to erosion ✓</p> <p>Crops no longer grow ✓</p> <p><b>PROBLEMS FOR PEOPLE</b></p> <p>Poorer grazing ✓</p> <p>Lower crop production ✓</p> <p>Underground water reserves used up ✓ so less water for crop production/irrigation ✓</p> <p>Puts pressure on food/water resources ✓</p> <p>Starvation (if qualified) ✓</p> <p>People forced to migrate ✓</p>	[6]
Section A Total		[20]

Section B– Your Chosen Extreme Environment		
Question Number	Answer	Max Mark
	<p><b>All answers must refer to either mountain environments or polar environments in order to gain credit</b></p>	
3(a)	<p><b>Explain <u>TWO</u> reasons why your chosen environment is extreme.</b></p> <p>Allow any TWO <b>specific</b> references to temperature, aridity/precipitation, relief/topography, isolation, altitude, danger and up to 2 marks for development (2+2).</p>	[4]
3(b)	<p><b>Describe and explain how physical processes have shaped the landscape of the area you have studied. You may use a diagram to illustrate your answer.</b></p> <p><b>MARKS</b></p> <p><b>Level 3 [5-6 marks]</b> A developed explanation of at least two processes linked to the landscape.</p> <p><b>Level 2 [3-4 marks]</b> Detailed explanation of one process or a basic explanation of two processes.</p> <p><b>Level 1 [1-2 marks]</b> Basic description of the processes involved. No links to landscape.</p> <p><b>0 marks</b></p> <p>No evidence submitted or response does not address the question.</p>	[6]
3(c)	<p><b>Explain why your chosen extreme environment is challenging for different groups of people.</b></p> <p>Ideas such as harsh living environment, struggle for survival, possible lack of income, negative impacts of tourism, notion of danger, physical challenge, climatic challenges, clothing/equipment choice etc.</p> <p>Levels of response marking</p> <p><b>MARKS</b></p> <p><b>Level 3 [5-6 marks]</b> Challenges are identified and described with explanatory detail, perhaps with specific examples given.</p> <p>At least TWO groups mentioned. Challenges relate to more than ONE group.</p> <p><b>Level 2 [3-4 marks]</b> Challenges are identified and described with some basic detail, together with some explanation.</p> <p>TWO groups mentioned. Challenges relate to more than ONE group.</p> <p><b>Level 1 [1-2 marks]</b> Challenge is identified and described in basic terms. ONE group mentioned. Challenge is related to group.</p> <p><b>0 marks</b></p> <p>No evidence submitted or response does not address the question.</p>	[6]

Section B– Your Chosen Extreme Environment		
Question Number	Answer	Max Mark
3(d)	<p><b>You have been asked to organise an expedition to your chosen extreme environment. Identify and justify at TWO essential survival items that you would take.</b></p> <p>Items may relate to clothing, food, survival etc and must relate to chosen extreme environment.</p> <p>E.g.</p> <p>Warm clothing ✓ to avoid chill/frostbite/survive sub-0 temperatures ✓</p> <p>Many layers ✓ to trap air to increase insulation ✓</p> <p>Sun glasses ✓ to ensure good vision ✓</p> <p>Dried food ✓ light to carry/relatively easy to cook ✓</p> <p>Energy food ✓ to provide body with energy to cope with physical challenge</p> <p>Gun/knife ✓ for protection from animals ✓</p> <p>GPS ✓ for accurate location/tracking ✓</p> <p>Radio ✓ to keep in contact in case of emergency ✓ (Mobile phone mark only if well argued)</p> <p>Point marking, two marks for appropriate item and associated justification.</p>	[4]
4(a)	<p><b>Identify <u>ONE</u> source that you found useful when studying your extreme environment. Explain how it helped your understanding of the extreme environment.</b></p> <p>Identification of resource no marks</p> <p>Point marking with ONE development mark available for reasons</p> <p>E.g.</p> <p>DVD had a lot of information about how people used the environment ✓</p> <p>It gave me a lot of facts and figures ✓ and also showed how difficult it was to live there ✓</p> <p>E.g.</p> <p>DVD had images that showed what the landscape was like ✓</p> <p>It was an up to date resource ✓ which meant that it showed the environment as it currently is ✓ (dev)</p>	[2]



Section B– Your Chosen Extreme Environment		
Question Number	Answer	Max Mark
4(b)	<p><b>How do you think your chosen extreme environment may change in the future? Explain the impact of these changes.</b></p> <p>Levels of response marking</p> <p><b>MARKS</b></p> <p><b>Level 4 [7-8 marks]</b> Changes are described with detailed explanation. Impact of changes on the environment is clearly given. Changes given are reasonable. Own views given with reasoning evident.</p> <p><b>Level 3 [5-6 marks]</b> Changes described with attempt to give description of impact. Own views related with some supporting evidence to back this up.</p> <p><b>Level 2 [3-4 marks]</b> Changes are identified with some detail. Mention of impact attempted. Mention made of own views attempted.</p> <p><b>Level 1 [1-2 marks]</b> Change(s) listed with little or no relevant explanation. Basic change with little or no reference to impact.</p> <p><b>0 marks</b></p> <p>No evidence submitted or response does not address the question.</p> <p>Changes may be physical, human, environmental or a combination of all.</p>	[8]
Section B Total		[30]
Paper Total		[50]

**Assessment Objectives Grid (includes QWC)**

<b>Question</b>	<b>A01</b>	<b>A02</b>	<b>A03</b>	<b>Total</b>
<b>1(a)</b>	3			<b>3</b>
<b>1(b)</b>	3			<b>3</b>
<b>1(c)(i)</b>			2	<b>2</b>
<b>1(c)(ii)</b>	1	2		<b>3</b>
<b>2(a)</b>	3			<b>3</b>
<b>2(b)</b>	4	2		<b>6</b>
<b>3(a)</b>	4			<b>4</b>
<b>3(b)</b>	4	2		<b>6</b>
<b>3(c)</b>	2	2	2	<b>6</b>
<b>3(d)</b>		4		<b>4</b>
<b>4(a)</b>			2	<b>2</b>
<b>4(b)</b>	2	2	4	<b>8</b>
<b>Totals</b>	<b>26</b>	<b>14</b>	<b>10</b>	<b>50</b>